

What is claimed is:

1. A flexible printing system comprising:
a printer comprising memory that stores a set of updateable print
characteristics and a print characteristics transfer mechanism; and
a printer consumable comprising memory that stores a set of print
characteristics, the printer consumable coupled to the print characteristics transfer
mechanism in order to update the set of updateable print characteristics in the printer
memory.
2. The system of claim 1 wherein the memory comprises semiconductor
memory and the transfer mechanism comprises a radio frequency receiver that
transfers the set of print characteristics from the memory over a radio frequency link.
3. The system of claim 1 wherein the memory comprises optical memory
and the transfer mechanism comprises a laser for reading the optical memory.
4. The system of claim 1 wherein the memory comprises semiconductor
memory and the transfer mechanism comprises electrical contacts that transfer
electrical signals from the memory to the printer.
5. The system of claim 1 wherein the memory comprises magnetic
memory and the transfer mechanism comprises a magnetic data reader for reading the
magnetic memory.
6. The system of claim 1 wherein the memory comprises a bar code and
the transfer mechanism comprises a laser scanner that scans the bar code and transfers
the scanned data to the printer.
7. The system of claim 1 wherein the updateable print characteristics are
replaced by the print characteristics stored in the print consumable memory.

8. The system of claim 1 wherein the updateable characteristics include a dithering algorithm.

5 9. The system of claim 1 wherein the updateable characteristics include color tables.

10 10. The system of claim 1 wherein the updateable characteristics include finishing processes.

11 11. The system of claim 10 wherein the finishing processes include a matte finish, a glossy finish, a satin finish, and finishes with varied surface roughness.

12 12. A flexible printing system comprising:
15 a printer comprising programmable memory that stores updateable print characteristics and a radio frequency receiver; and
a printer consumable comprising memory that stores a set of printer characteristics and a radio frequency transmitter that transmits the printer characteristics to the radio frequency receiver.

20 13. A method for updating printing characteristics in a printing system comprising a printer having radio frequency identification capability and a first set of printing characteristics and printer data memory that stores a second set of printing characteristics, the method comprising the steps of:

25 the printer querying the printer data memory;
when the printer data memory responds, the printer retrieving the second set of printing characteristics from the printer data memory over a radio frequency link; and
updating the printer with the second set of printing characteristics.

14. The method of claim 13 and further including the step of if the first set and the second set of printing characteristics are substantially equivalent, the printer using the first set of printing characteristics.

5 15. The method of claim 13 and further including the step of if the second set of printing characteristics is incompatible with capabilities of the printer, the printer using the first set of printing characteristics.

16. The method of claim 13 wherein the second set of printing
10 characteristics comprises a color table and a dithering algorithm.

17. The method of claim 13 wherein the first and second sets of printing characteristics comprise a color table.

15 18. The method of claim 13 wherein the second set of printing characteristics comprises a dithering algorithm.

19. The method of claim 13 wherein the second set of printing characteristics comprises finishing parameters.

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20. A method for updating printing characteristics in a printing system comprising a printer having a card reader and a first set of printing characteristics and a data card that stores a second set of printing characteristics, the method comprising the steps of:

25 coupling the data card to the card reader;
the printer reading the second set of printing characteristics from the data card;
if the second set of printing characteristics are different from the first set of printing characteristics, the printer retrieving the second set of printing characteristics from the data card; and
30 updating the first set of printing characteristics with the second set of printing characteristics.

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21. A method for updating printing characteristics in a printing system comprising a printer having a card reader and a first set of printing characteristics and a data card that stores a second set of printing characteristics, the method comprising the steps of:
- coupling the data card to the card reader;
 - the printer reading the second set of printing characteristics from the data card;
 - if the second set of printing characteristics are different from the first set of printing characteristics and the printer is capable of using the printing characteristics, the printer retrieving the second set of printing characteristics from the data card; and
 - updating the first set of printing characteristics with the second set of printing characteristics.
22. A flexible printing system comprising:
- a printer comprising:
 - memory that stores updateable printing characteristics; and
 - a print characteristics transfer mechanism;
 - a network connection that enables the printer to access a network; and
 - a printer data memory that stores a uniform resource locator, the printer data memory coupled to the print characteristics transfer mechanism in order to transfer the uniform resource locator to the printer.
23. The system of claim 22 wherein the network connection comprises a modem that is coupled to the public switched telephone network.
24. The system of claim 22 wherein the network connection comprises a computer having Internet access capabilities.
25. The system of claim 22 wherein the network is the Internet.

26. A method for updating printing characteristics in a printing system comprising a printer having a card reader, network access capability, and a first set of printing characteristics, the system further comprising a data card that stores a network identification of a location on a network, the method comprising the steps of:

- 5 coupling the data card to the card reader;
 the printer reading the network identification from the data card;
 accessing the network identification over the network;
 accessing a second set of printing characteristics at the network location designated by the network identification;
10 if the second set of printing characteristics is different from the first set of printing characteristics and the printer is capable of using the second set of printing characteristics, the printer retrieving the second set of printing characteristics from the network location; and
 updating the first set of printing characteristics in response to the second set of
15 printing characteristics.

27. The method of claim 26 wherein the step of accessing the uniform resource locator over the Internet includes accessing the uniform resource locator through a computer coupled to the printer.

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28. A printer cartridge apparatus having a capability for printing on media and updating printing characteristics of a printer, the apparatus comprising:

- memory that stores printing characteristics for use by the printer;
 means for transferring the printing characteristics to the printer, the means
25 coupled to the memory; and
 means for printing on the media.

29. The apparatus of claim 28 wherein the printing characteristics include a dithering algorithm and a color table.

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